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EXAMINER	
CHOW, CHARLES CHIANG	

ART UNIT	PAPER NUMBER
2685	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)	
	10/038,879	COLLINS, DAVID ALLAN	
	Examiner	Art Unit	
	Charles Chow	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 05 August 2004.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-36 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 31 December 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Specification

1. The abstract of the disclosure is objected to because the abstract is too long, near 156 words.

Correction is required. See MPEP§ 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-7, 13-19, 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gulliford et al. (US 5,995,831) in view of Okanoya et al. (US 6,128,657).

Regarding **claim 1**, Gulliford et al. (Gulliford) teaches a controller (node processor 12, Fig. 1) for providing a subscriber data base associated with switch (the subscriber database for all subscriber pertinent information, such as phone number, service profile, associated with call object utilized by node processor 12, in col. 4, line 62 to col. 5, line 10; the node processor 12, 12', communicates with matrix switch 14 via switch interface object 22 for call connection to trunk PSTN 16, for call connection to cellsite 18 via cellsite interface object 26 Fig. 2, col. 4, lines 51-62; col. 3, line 34 to col. 4, line 49) said switch capable of handing call

connections between calling devices and called devices on a plurality of trunk lines associated with said switch (the inbound, outbound, call connection via matrix switch between mobile phone and telephone device connected to the trunk lines at PSTN 16, col. 4, lines 21-49; the matrix switch 14 to seizing a PSTN trunk line for call connection in col. 5, lines 26-35; the state table for call connection, mobile-to-trunk state/event table, trunk-to-mobile state table", in col. 16, lines 16-39), the switch capable executing call processing applications (matrix switch 14 having switch interface object 22 for executing call processing applications, for GSM, Amps, E-Tacs system in col. 3, lines 57-61), each of said call processing applications is associated with one of said call connections (the different specifications and protocol for diverse set of cell-sites utilizing software 24, 22, 26, col. 4, lines 54-62), Gulliford fails to teach the controller comprising N call application nodes capable of executing plurality of subscriber database server applications that connect a subscriber database to a call connection, and other claimed features in this claim. However, Okanoya et al. (Okanoya) teaches the controller (controller 6 in Fig. 1, col. 4, line 66 to col. 5, line 14) comprising N call application nodes (server nodes 2-4, Fig. 1) capable of executing plurality of subscriber database server applications that connect a subscriber database to a call connection (database applications 11, 21, 31, running on server 10, 20, 30 respectively for accessing database DB 42, 43 in Fig. 15, col. 10, line 41 to col. 11, line 7, for the database load sharing system in col. 1, lines 5-25; col. 2, line 31 to col. 3, line10; the application status for each application in Fig. 19), a first subscriber database serve application is executed on a first one of said N call application nodes (application 11 running on node for server 10) and is associated with a similar second subscriber database server

application executed on a second one of said N call application nodes separate from the first call applications (the second database server application, service- A, running in server node 30 is associated with similar service-A on the server 20 in Fig. 27-28, col. 18, line 37 to col. 19, line 32), thereby forming a subscriber database load sharing group server application (the condition group A1in Fig. 27 for handling 100 maximum request for server x, server y, in Fig. 28 and col. 18, line 37 to col. 19, line 32; the N candidate group 1-N in Fig. 19), wherein said call processing application sends a subscriber database service request to said subscriber database load sharing group server application (the controller 100 has load distribution program 110 for distributing service request to server x, server y, according to their load status and maximum capacity for accepting the service request, in col. 6, lines 6-24 and col. 18, line 28 to col. 19, line 32), and said subscriber database load sharing group server application (the distribution program 110 consists of distribution processor 112 and state manager 111 in col. 6, lines 10-12; for distributing load sharing among server group A11, A12, A2, B11, B12, B21, B22, based on the capable maximum number requests for a database server application in Fig. 22-24 and col. 16, line 15 to col. 17, line 48) selects one of the first and second subscriber database server applications to perform said requested subscriber database service request according to a load distribution algorithm (the selected server in col. 2, lines 38 to col. 3, line 10; the state manager 111, the distribution processor 112 for optimizing load sharing for the user service request in Fig. 15, steps S51-60). Okanoya teaches the improved load sharing with high reliability with resource optimization (col. 2, lines 4-37) based on the load activity status of the database server program application. Therefore, it would have been obvious to one of ordinary skill in the art at the

time of invention to modify Gulliford with Okanoya's load sharing for database sever application, such that the service request could be handled with high reliability efficiently by optimizing the resource.

Regarding **claim 2**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests in an alternating manner between the first and second subscriber database server applications (the load distributing in Fig. 9 for server pair, server 1-APL1-01 and server 2-APL1-02, with 50 requests, distribution radio of 10, respectively; or 100 requests on APL2-03 and zero request on APL3-04, col. 8, line 36 to col. 9, line 3; the algorithm in 521-523 in Fig. 19, the candidate status, distribution ratio, maximum acceptable request, number of current sessions, number of total session).

Regarding **claim 3**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests according to a current call process load of the first subscriber database server application and a current call process load of the second subscriber database server application (the latest status on application 11, 21, 31, for determining the load distribution by distribution processor 112 in col. 10, line 58 to col. 11, line 7; the load distribution based on the current load status information as shown in Fig. 19, the candidate status, distribution ratio, maximum acceptable request, number of current sessions, number of total session, for each database server application program).

Regarding **claim 4**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests in order to maintain the current call process load of the subscriber database server application at a level substantially equal to the current call process load of the second subscriber database server application (the maintaining current load for

each server APL1-01, APL1-02, at substantially equal number of assigned service request of 50 with distribution ratio of 10 as shown in Fig. 19; col. 13, line 56 to col. 14, line 2).

Regarding **claim 5**, Okanoya teaches the first subscriber database server comprising a first primary backup group server application, executed on the first call application node and first back subscriber database server application associated with the first primary subscriber database server application (the primary server x in Fig. 28 has the associated backup server 33 for running on server node 20;col. 18, line 66 to col. 19, line 11; col. 18, lines 37-64; col. 29, line 7 to col. 30, line 6).

Regarding **claim 6**, Okanoya teaches the state information associated with the first subscriber database server application is mirrored to said first backup subscriber database server application associated with the first primary subscriber database server application (the seamlessly switching, mirrored, to the backup server application unit with activity control parameters in col. 19, lines 12-15).

Regarding **claim 7**, Okanoya teaches the first backup subscriber database server application resides on the first call application node (both backup server 33 and primary 23 are resides on the node for service A, as shown in Fig. 28, col. 18, lines 37-45).

Regarding **claim 13**, Gulliford teaches a wireless network (wireless system 10 in Fig. 1-2, abstract) comprising a plurality of base stations (the cell sites' base station in abstract, cellsites 18 in Fig. 1) capable of communicating with a plurality of mobile stations in a coverage area of wireless network (the mobile phone communication with base station in col. 4, lines 21-49), a mobile switching center coupled to said plurality of base stations (the matrix switch 14 and processor 12 forms the mobile switching center which is coupled to the

plurality of base stations for the cell site 18 in Fig. 1, the plurality of cell-sites 18, 18' in col. 3, lines 54-65), and to a public switched telephone network by plurality of trunk lines (PSTN 16 connected to matrix switch 14 having trunk line in col. 4, lines 21-49; the matrix switch 14 to seizing a PSTN trunk line for call connection in col. 5, lines 26-35; mobile-to-trunk state/event table, trunk-to-mobile state table", in col. 16, lines 16-39), wherein mobile switching center is capable of handling call connection between calling devices and called device on the plurality trunk lines (the inbound, outbound, call connection via matrix switch between mobile phone and telephone device connected to the trunk lines at PSTN 16, col. 4, lines 21-49; the matrix switch 14 to seizing a PSTN trunk line for call connection in col. 5, lines 26-35; the state table for call connection, mobile-to-trunk state/event table, trunk-to-mobile state table", in col. 16, lines 16-39), wherein the mobile switching center is capable of executing call process applications (the call process objects 22, 24, 26, 12' in Fig. 2), wherein each of said call processing applications is associated with one of the call connection (matrix switch 14 having switch interface object 22 for executing call processing applications, for GSM, Amps, E-Tacs system in col. 3, lines 57-61, for different specifications and protocol for diverse set of cell-sites utilizing software 24, 22, 26, col. 4, lines 54-62), a controller (node processor 12, Fig. 1) for providing a subscriber data base associated with mobile switching center (the subscriber database for all subscriber pertinent information, such as phone number, service profile, associated with call object utilized by node processor 12, in col. 4, line 62 to col. 5, line 10; the node processor 12, 12', communicates with matrix switch 14 via switch interface object 22 for call connection to trunk PSTN 16, for call connection to cellsite 18 via cellsite interface object 26 Fig. 2, col. 4, lines 51-62; col. 3, line 34 to col. 4,

line 49), Gulliford fails to teach the controller comprising N call application nodes capable of executing plurality of subscriber database server applications that connect a subscriber database to a call connection, and other claimed features in this claim. However, Okanoya et al. (Okanoya) teaches the controller (controller 6 in Fig. 1, col. 4, line 66 to col. 5, line 14) comprising N call application nodes (server nodes 2-4, Fig. 1) capable of executing plurality of subscriber database server applications that connect a subscriber database to a call connection (database applications 11, 21, 31, running on server 10, 20, 30 respectively for accessing database DB 42, 43 in Fig. 15, col. 10, line 41 to col. 11, line 7, for the database load sharing system in col. 1, lines 5-25; col. 2, line 31 to col. 3, line10; the application status for each application in Fig. 19), a first subscriber database serve application is executed on a first one of said N call application nodes (application 11 running on node for server 10) and is associated with a similar second subscriber database server application executed on a second one of said N call application nodes separate from the first call applications (the second database server application, service- A, running in server node 30 is associated with similar service-A on the server 20 in Fig. 27-28, col. 18, line 37 to col. 19, line 32), thereby forming a subscriber database load sharing group server application (the condition group A1in Fig. 27 for handling 100 maximum request for server x, server y, in Fig. 28 and col. 18, line 37 to col. 19, line 32; the N candidate group 1-N in Fig. 19), wherein said call processing application sends a subscriber database service request to said subscriber database load sharing group server application (the controller 100 has load distribution program 110 for distributing service request to server x, server y, according to their load status and maximum capacity for accepting the service request, in col. 6, lines 6-24 and col. 18, line 28 to col. 19,

line 32), and said subscriber database load sharing group server application (the distribution program 110 consists of distribution processor 112 and state manager 111 in col. 6, lines 10-12; for distributing load sharing among server group A11, A12, A2, B11, B12, B21, B22, based on the capable maximum number requests for a database server application in Fig. 22-24 and col. 16, line 15 to col. 17, line 48) selects one of the first and second subscriber database server applications to perform said requested subscriber database service request according to a load distribution algorithm (the selected server in col. 2, lines 38 to col. 3, line 10; the state manager 111, the distribution processor 112 for optimizing load sharing for the user service request in Fig. 15, steps S51-60). Okanoya teaches the improved load sharing with high reliability with resource optimization (col. 2, lines 4-37) based on the load activity status of the database server program application. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gulliford with Okanoya's load sharing for database sever application, such that the service request could be handled with high reliability efficiently by optimizing the resource.

Regarding **claim 14**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests in an <u>alternating manner</u> between the first and second subscriber database server applications (the load distributing in Fig. 9 for server pair, server 1-APL1-01 and server 2-APL1-02, with 50 requests, distribution radio of 10, respectively; or 100 requests on APL2-03 and zero request on APL3-04, col. 8, line 36 to col. 9, line 3; the algorithm in 521-523 in Fig. 19, the candidate status, distribution ratio, maximum acceptable request, number of current sessions, number of total session).

Regarding **claim 15**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests according to a current call process load of the first subscriber database server application and a current call process load of the second subscriber database server application (the latest status on application 11, 21, 31, for determining the load distribution by distribution processor 112 in col. 10, line 58 to col. 11, line 7; the load distribution based on the current load status information as shown in Fig. 19, the candidate status, distribution ratio, maximum acceptable request, number of current sessions, number of total session, for each database server application program).

Regarding **claim 16**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests in order to maintain the current call process load of the subscriber database server application at a level substantially equal to the current call process load of the second subscriber database server application (the maintaining current load for each server APL1-01, APL1-02, at substantially equal number of assigned service request of 50 with distribution ratio of 10 as shown in Fig. 19; col. 13, line 56 to col. 14, line 2).

Regarding **claim 17**, Okanoya teaches the first subscriber database server comprising a first primary backup group server application, executed on the first call application node and first back subscriber database server application associated with the first primary subscriber database server application (the primary server x in Fig. 28 has the associated backup server 33 for running on server node 20;col. 18, line 66 to col. 19, line 11; col. 18, lines 37-64; col. 29, line 7 to col. 30, line 6).

Regarding **claim 18**, Okanoya teaches the state information associated with the first subscriber database server application is mirrored to said first backup subscriber database

server application associated with the first primary subscriber database server application (the seamlessly switching, mirrored, to the backup server application unit with activity control parameters in col. 19, lines 12-15).

Regarding **claim 19**, Okanoya teaches the first backup subscriber database server application resides on the first call application node (both backup server 33 and primary 23 are resides on the node for service A, as shown in Fig. 28, col. 18, lines 37-45).

Regarding **claim 25**, Gulliford teaches for use in a wireless network (wireless system 10 in Fig. 1-2, abstract, the utilizing objected oriented software, title) comprising a plurality of base stations (the cell sites' base station in abstract, cellsites 18 in Fig. 1) capable of communicating with a plurality of mobile stations in a coverage area of wireless network (the mobile phone communication with base station in col. 4, lines 21-49), a mobile switching center coupled to said plurality of base stations (the matrix switch 14 and processor 12 forms the mobile switching center which is coupled to the plurality of base stations for the cell site 18 in Fig. 1, the plurality of cell-sites 18, 18' in col. 3, lines 54-65), and to a public switched telephone network by plurality of trunk lines (PSTN 16 connected to matrix switch 14 having trunk line in col. 4, lines 21-49; the matrix switch 14 to seizing a PSTN trunk line for call connection in col. 5, lines 26-35; mobile-to-trunk state/event table, trunk-to-mobile state table", in col. 16, lines 16-39), wherein mobile switching center is capable of handling call connection between calling devices and called device on the plurality trunk lines (the inbound, outbound, call connection via matrix switch between mobile phone and telephone device connected to the trunk lines at PSTN 16, col. 4, lines 21-49; the matrix switch 14 to seizing a PSTN trunk line for call connection in col. 5, lines 26-35; the state table for call

connection, mobile-to-trunk state/event table, trunk-to-mobile state table", in col. 16, lines 16-39), wherein the mobile switching center is capable of executing call process applications (the call process objects 22, 24, 26, 12' in Fig. 2), wherein

each of said call processing applications is associated with one of the call connection (matrix switch 14 having switch interface object 22 for executing call processing applications, for GSM, Amps, E-Tacs system in col. 3, lines 57-61, for different specifications and protocol for diverse set of cell-sites utilizing software 24, 22, 26, col. 4, lines 54-62), a controller (node processor 12, Fig. 1) for providing a subscriber data base associated with mobile switching center (the subscriber database for all subscriber pertinent information, such as phone number, service profile, associated with call object utilized by node processor 12, in col. 4, line 62 to col. 5, line 10; the node processor 12, 12', communicates with matrix switch 14 via switch interface object 22 for call connection to trunk PSTN 16, for call connection to cellsite 18 via cellsite interface object 26 Fig. 2, col. 4, lines 51-62; col. 3, line 34 to col. 4, line 49), Gulliford fails to teach the controller comprising N call application nodes capable of executing plurality of subscriber database server applications that connect a subscriber database to a call connection, and other claimed features in this claim. However, Okanoya teaches the controller (controller 6 in Fig. 1, col. 4, line 66 to col. 5, line 14) comprising N call application nodes (server nodes 2-4, Fig. 1) capable of executing plurality of subscriber database server applications that connect a subscriber database to a call connection (database applications 11, 21, 31, running on server 10, 20, 30 respectively for accessing database DB 42, 43 in Fig. 15, col. 10, line 41 to col. 11, line 7, for the database load sharing system in col. 1, lines 5-25; col. 2, line 31 to col. 3, line10; the application status for each application in

Fig. 19), a first subscriber database serve application is executed on a first one of said N call application nodes (application 11 running on node for server 10) and is associated with a similar second subscriber database server application executed on a second one of said N call application nodes separate from the first call applications (the second database server application, service- A, running in server node 30 is associated with similar service-A on the server 20 in Fig. 27-28, col. 18, line 37 to col. 19, line 32), thereby forming a subscriber database load sharing group server application (the condition group A1in Fig. 27 for handling 100 maximum request for server x, server y, in Fig. 28 and col. 18, line 37 to col. 19, line 32; the N candidate group 1-N in Fig. 19), sending a subscriber database service request to said subscriber database load sharing group server application (the controller 100 has load distribution program 110 for distributing service request to server x, server y, according to their load status and maximum capacity for accepting the service request, in col. 6, lines 6-24 and col. 18, line 28 to col. 19, line 32), and said subscriber database load sharing group server application (the distribution program 110 consists of distribution processor 112 and state manager 111 in col. 6, lines 10-12; for distributing load sharing among server group A11, A12, A2, B11, B12, B21, B22, based on the capable maximum number requests for a database server application in Fig. 22-24 and col. 16, line 15 to col. 17, line 48), selecting one of the first and second subscriber database server applications to perform said requested subscriber database service request, and performing the requested subscriber database service request according to a load distribution algorithm (the selected server in col. 2, lines 38 to col. 3, line 10; the state manager 111, the distribution processor 112 for optimizing load sharing for the user service request in Fig. 15, steps S51-60). Okanoya teaches the improved

load sharing with high reliability with resource optimization (col. 2, lines 4-37) based on the load activity status of the database server program application. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gulliford with Okanoya's load sharing for database sever application, such that the service request could be handled with high reliability efficiently by optimizing the resource.

Regarding **claim 26**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests in an alternating manner between the first and second subscriber database server applications (the load distributing in Fig. 9 for server pair, server 1-APL1-01 and server 2-APL1-02, with 50 requests, distribution radio of 10, respectively; or 100 requests on APL2-03 and zero request on APL3-04, col. 8, line 36 to col. 9, line 3; the algorithm in 521-523 in Fig. 19, the candidate status, distribution ratio, maximum acceptable request, number of current sessions, number of total session).

Regarding **claim 27**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests according to a current call process load of the first subscriber database server application and a current call process load of the second subscriber database server application (the latest status on application 11, 21, 31, for determining the load distribution by distribution processor 112 in col. 10, line 58 to col. 11, line 7; the load distribution based on the current load status information as shown in Fig. 19, the candidate status, distribution ratio, maximum acceptable request, number of current sessions, number of total session, for each database server application program).

Regarding **claim 28**, Okanoya teaches the load distribution algorithm distributes new subscriber database service requests in order to maintain the current call process load of the

subscriber database server application at a level substantially equal to the current call process load of the second subscriber database server application (the maintaining current load for each server APL1-01, APL1-02, at substantially equal number of assigned service request of 50 with distribution ratio of 10 as shown in Fig. 19; col. 13, line 56 to col. 14, line 2).

Regarding **claim 29**, Okanoya teaches the first subscriber database server comprising a first primary backup group server application, executed on the first call application node and first back subscriber database server application associated with the first primary subscriber database server application (the primary server x in Fig. 28 has the associated backup server 33 for running on server node 20;col. 18, line 66 to col. 19, line 11; col. 18, lines 37-64; col. 29, line 7 to col. 30, line 6).

Regarding **claim 30**, Okanoya teaches the state information associated with the first subscriber database server application is mirrored to said first backup subscriber database server application associated with the first primary subscriber database server application (the seamlessly switching, mirrored, to the backup server application unit with activity control parameters in col. 19, lines 12-15).

Regarding **claim 31**, Okanoya teaches the first backup subscriber database server application resides on the first call application node (both backup server 33 and primary 23 are resides on the node for service A, as shown in Fig. 28, col. 18, lines 37-45).

3. Claims 8-12, 20-24, 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gulliford in view of Okanoya, as applied to claim 6 above, and further in view of Koning et al. (US 2003/0005,350 A1).

Regarding **claim 8**, Gulliford and Okanoya fail to teach the first backup subscriber database server application resides on a call application node separate from the first call application node. However, Koning et al. (Koning) teaches the first primary backup subscriber database server application resides on a separate call application node B for group 1, which is separate from the primary server on node A, in Fig. 1. Koning teaches the failover manager FMS monitors each application server S for failover, in order to maintaining the database service for the server application, node, and server group, by utilizing the backup servers [0044, abstract], to reduce the impact the operation of other processors on the network [0001]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gulliford above koning's backup servers, such that the application failover could be backed up by the backup server, to reduce the impact to the other processors.

Regarding **claim 9**, Koning teaches the second primary-backup group server application (backup server in group 4 on node C, Fig. 1) executed on the second call application node (node C) and a second backup subscriber database server application associated with the second primary subscriber database server application (the associated primary server in group 4, Fig. 1).

Regarding **claim 10**, Koning teaches the state information associated with second primary subscriber database server application is mirrored to second backup subscriber database server application associated with the second primary subscriber database server application (the standby FMS synch server maintains a database having the same information as each active server formed on database maintained by active FMS synch server [0044], such that

the second primary server applicaiton is mirrored to the associated second backup server application).

Regarding **claim 11**, Koning teaches the second backup subscriber database server application resides on the second call application node (the second, backup server in group 2 on node C resides on the second node C which is different from first node A, Fig. 1).

Regarding **claim 12**, Koning teaches the second backup subscriber database server application resides on a call application node separate from the second call application node (the second backup server in group 2 resides on node C which is separate from the second application node B, in Fig. 1).

Regarding **claim 20**, Koning teaches the first primary backup subscriber database server application resides on a separate call application node B for group 1, which is separate from the primary server on node A, in Fig. 1.

Regarding **claim 21**, Koning teaches the <u>second primary-backup group</u> server application (backup server in group 4 on node C, Fig. 1) executed on the second call application node (node C) and a second backup subscriber database server application associated with the second primary subscriber database server application (the associated primary server in group 4, Fig. 1).

Regarding **claim 22**, Koning teaches the state information associated with second primary subscriber database server application is mirrored to second backup subscriber database server application associated with the second primary subscriber database server application (the standby FMS synch server maintains a database having the same information as each active server formed on database maintained by active FMS synch server [0044], such that

the second primary server applicaiton is mirrored to the associated second backup server application).

Regarding **claim 23**, Koning teaches the second backup subscriber database server application resides on the second call application node (the second, backup server in group 2 on node C resides on the second node C which is different from first node A, Fig. 1).

Regarding **claim 24**, Koning teaches the second backup subscriber database server application resides on a call application node separate from the second call application node (the second backup server in group 2 resides on node C which is separate from the second application node B, in Fig. 1).

Regarding **claim 32**, Koning teaches the first primary backup subscriber database server application resides on a separate call application node B for group 1, which is separate from the primary server on node A, in Fig. 1.

Regarding **claim 33**, Koning teaches the <u>second primary-backup group</u> server application (backup server in group 4 on node C, Fig. 1) executed on the second call application node (node C) and a second backup subscriber database server application associated with the second primary subscriber database server application (the associated primary server in group 4, Fig. 1).

Regarding **claim 34**, Koning teaches the state information associated with second primary subscriber database server application is mirrored to second backup subscriber database server application associated with the second primary subscriber database server application (the standby FMS synch server maintains a database having the same information as each active server formed on database maintained by active FMS synch server [0044], such that

the second primary server applicaiton is mirrored to the associated second backup server application).

Regarding **claim 35**, Koning teaches the second backup subscriber database server application resides on the second call application node (the second, backup server in group 2 on node C resides on the second node C which is different from first node A, Fig. 1).

Regarding **claim 36**, Koning teaches the second backup subscriber database server application resides on a call application node separate from the second call application node (the second backup server in group 2 resides on node C which is separate from the second application node B, in Fig. 1).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. US 6,134,216, Gehi et al. teaches the over load control for a switch having message process, call processor, plurality of network modules 30 (abstract, Fig. 1-6) based on the long term and short term overload level, state (col. 2, lines 5-35).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Charles Chow C.C.

August 24, 2004.

EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600